The Effect of MMS (Metacognitive, Monitoring, Summarizing) Strategy in Improving Students' Reading Comprehension

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Abstract
This study aimed to find out a significant influence from the use of Metacognitive, Monitoring, and Summarizing (MMS). This research used quantitative with an experimental design using 2 class samples (control class and experimental class) which was randomly selected and each class consisted of 30 students as respondents. Data collection used tests to determine students' reading skills. The data that has been obtained was analyzed using the t-test in SPSS. Based on the results obtained that the t-count is 0.001 which is lower than α = 0.05, so there was a significant difference between before and after treatment between the control and experimental class.

Keywords
Reading
Teaching Method
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Introduction

Reading is the ability to derive meaning from written symbols. Written symbols are defined as text, books, etc. Harmer (2001) explains that reading will involve the eyes and brain to work together so that readers can get some information from what they read. When the reader reads a book, the eye works to receive and transmit written symbols to the brain and functions to construct meaning from them. Reading activity is not an ordinary activity because the quality of good reading is also determined by other factors. It involves not only eye and brain processes but also includes psycholinguistics and sociolinguistics. Weaver (2009) supports that reading activities include mental (psycholinguistic) and social (sociolinguistic) factors that will work actively to process text which can affect how readers read and how much readers get from reading activities themselves. Snow (2002) defines reading comprehension as the process of extracting and forming meaning simultaneously through interaction and involvement with written language. In reading comprehension, extracting meaning refers to the reader's understanding of what the writer wants to convey through the text, either explicitly or implicitly. Klinger et al (2007) emphasized that reading comprehension is a complex process of constructing meaning by coordinating a number of skills related to decoding, reading words and fluency. This really shows that reading comprehension involves as much interaction between readers as the knowledge the reader has and the strategies the reader uses in making judgments about what the writer describes in the text. To become better readers, students need to be aware of what they can do to increase their understanding. Brown (2001) clarified that reading comprehension is primarily a matter of developing appropriate and efficient comprehension strategies. There are so many learning strategies that can be used by an English lecturer. Learning strategies are important to help students having better understanding in reading comprehension. The strategies that are familiars are such as metacognitive, monitoring, and summarizing.

In a classroom setting, metacognitive knowledge has functions to force students thinking about how they will manage it and it combines various thoughts and reflective processes; moreover, it has great benefit from the use of metacognitive strategies in learning (Camalah, 2006; McMahon, 2009). Metacognitive strategies are considered as high-level executive skills that utilize cognitive processing knowledge and attempts to organize their own learning with five main components: (1) preparing and planning lessons; (2) selecting and using learning strategies; (3) monitoring the use of strategies; (4) managing various strategies; (5) evaluating the use of strategies and learning (Anderson, 2002; Zhang and Sheepo, 2013). Metacognition plays an important role in reading comprehension. Research on metacognition has revealed that less proficient learners do not recognize the purpose of reading and tend to focus on reading words rather than reading for meaning. Poor readers often finish reading without knowing and understanding the content of the text. The purpose of metacognitive teaching is to help readers become more aware of their own thoughts during the reading process. During teaching, the teacher provides explicit instructions on the use of metacognitive reading strategies that students can use while reading. Metacognitive strategies improve reader's meaning construction, monitoring of text and reading comprehension, and their ability to evaluate the text they are reading. Meanwhile, the comprehension monitoring strategy is not new because it is widely recognized for its importance in reading comprehension (Block & Pressley, 2002). In addition, monitoring comprehension is the process of checking comprehension during reading. In reading strategies, it is one aspect of metacognitive control in reading comprehension. This strategy is a process in which the learner evaluates the state of his understanding in understanding the information and it directs the reader's cognitive processes as he attempts to make textual information understandable by detecting , such as random sentences, contradictory sentences or statements that contradict background knowledge (Oakhill, Hartt, & Samols, 2005; Kolic'-Vehovec and Bajs˘anski, 2007).

Furthermore, summarizing is a strategy to help understand what is being read and is an activity that requires students to understand, analyze, and synthesize ideas. Summarizing teaches learners how to take a large selection of texts and reduce them to main points for more concise understanding. After reading a section, summarizing helps learners to learn by defining important ideas and incorporate important details that support

them because it is an effective learning strategy that can help students to build and maintain brief summaries of important propositions from the text (Naseri, Assaadi & Zoghi, 2013; Pakzadian & Rasekh, 2012; Khathayut & Karavi, 2011). This startegy allows learners to focus on the key words and phrases of the assigned text that need to be noted and remembered to accelerate their memory and comprehension. Summarizing has many advantages in reading comprehension. Learners will be creative to summarize texts in their own language and they will be motivated to learn and read the material as well.

Previous studies, from Usman et al (2017) states that the use of metacognitive strategies can improve students' reading comprehension skills. His study used an experimental research method using two classes as research samples that produced t-count (6.03)> t-table (2.01) which stated that the treatment was effective in increasing reading comprehension. Furthermore, Gomez and Sanjose (2012) Effectiveness of Comprehension Monitoring Strategies in EFL of Non-Bilingual Spanish University Students Reading Science Texts resulted in the conclusion that the treatment given to the sample had increased their English proficiency. The increase in English proficiency occurred in the 159 samples involved in their research in which English as a foreign language was the same as in Indonesia. Finally, Nurhayati and Fitriana (2018) conducted a study on the effectiveness of summarizing in teaching reading comprehension. The results showed that the treatment given gave positive results or it could be said that summarizing was able to improve reading ability of foreign language learners. Based on the three studies above, it is stated that these strategies (metacognitive, monitoring, summarizing) are successful in helping to improve reading comprehension of learners of English as a foreign language. Meanwhile, in this study, the writers did not only use one of the strategies mentioned above, but the writers used the three strategies to determine the impact of its use in teaching reading comprehension. The combination of these strategies is carried out because the three strategies have the same character and each has advantages. In the metacognitive strategy, students can control their reading activities in order to understand what is being read by identifying what and where difficulties arise in their reading activities. Then, in monitoring strategy, students have a strategy to "fix" problems that arise in their understanding by teaching students to identify what makes them do not understand and where students can directly monitor the problem. Finally, in the summarizing strategy, students can determine what is important in their reading, and they can express it in their own words so that they can better understand the reading.

However, before this pandemic occurs, the lecturer is asked to always apply cooperative learning. The main purpose of cooperative learning is that students work together in understanding something. discussion material. However, for now the majority of teaching uses online methods, it is very difficult to do this because of limited space. Online teaching will be more effective if done individually in the midst of this outbreak, as everyone is being asked to stay at home.In this study, researchers tried to implement a strategy in which this strategy is a combination of three existing strategies called MMS (Metacognitive, Monitoring, Summarizing) comprehension. This teaching strategy has been widely applied and studied by several researchers in teaching reading (reading comprehension), but in this study the researchers combined and saw the results of the combined application of these strategies.

Method

To get the results of this study, researchers used experimental research that would measure the impact of treatment on reading comprehension. The type of experiment used in this study is a quasi experiment in which the two experimental groups were given treatment to determine the impact at the end of the treatment. The treatment that was given was teaching strategies in reading comprehension. The teaching strategy that was used is MMS (Metacognitive, Monitoring, Summarizing) Comprehension. This strategy is commonly used in teaching reading. This treatment was given to the experimental group while the control group only uses conventional teaching treatment.

The study population was second semester of English students. Samples were two classes that were taken to determine the impact of the treatment on the control group and the experimental group. To obtain research data, the writers used a test instrument consisting of a pre-test and post-test after the treatment was applied. The test given is a multiple choice reading comprehension test to measure students' reading ability. After the data is collected, it will be processed using SPSS 23 software to calculate normality, homogeneity and hypothesis testing.

Results

In this section, a report is presented in the form of a data description in which the researcher tries to compare the achievement results of the pre-test and post-test in the sample class. The aim is to find out whether there is an impact from using MMS (Metacognitive, Monitoring, Summarizing) as a teaching strategy that is applied to reading learning in the sample class. However, before the researcher presented the results of the study, the researcher conducted several prerequisite tests such as: Normality Test and Homogeneity Test. Normality testing is done to find out whether the data taken is normally distributed or not. This is important to ensure the accuracy of the statistical tests that will be carried out later. While the homogeneity test was carried out to determine whether the variance of the data distribution in the sample of this study was homogeneous or not. So that the researcher can correctly enter the calculation to test the hypothesis (t-test) according to the existing criteria.

Based on the normality test of the control class and the experimental class, the following data are known and obtained:

Tabel 1. Normality Test

	Pres-Test			Post-Test		
Class	Statistic	df	Sig.	Statistic	df	Sig.
Control Pre	.938	30	.080	.938	30	.082
Experiment Pre	.951	30	.175	.937	30	.076

By paying attention to the normality hypothesis, if the significance value is> 0.05, then the research data is normally distributed and vice versa. From the results of the calculation of the table above regarding the Shpiro-Wilk normality test pre-test in the control and experimental classes, it is obtained for the control class the significance value is 0.080 and the experimental class is 0.175. Both values are> 0.05 so that the distribution of pre-test data in both classes is normal. Then for the post-test data in the table above, the significance value for the control class is 0.082 and the experimental class is 0.76. Both values are> than 0.05, so it can be concluded that the distribution of prost-test data in the two classes is normal.

After that, to fulfill the next requirement, the two data from the two classes must be tested for homogeneity. The homogeneity test in this study used SPSS with Levene's calculation. Based on the data in the table below, it can be seen that the significance value is 0.194. In accordance with the homogeneity hypothesis if the significance value is> 0.05, then the data distribution is homogeneous. So it can be concluded that the distribution of the data for the two classes is homogeneous.

Table 2. Homogenity Test

Scoring			
Levene Statistic	df1	df2	Sig.
1.724	1	58	.194

After that, to fulfill the next requirement, the two data from the two classes must be tested for homogeneity. The homogeneity test in this study used SPSS with Levene's calculation. Based on the data in the table below, it can be seen that the significance value is 0.194. In accordance with the homogeneity hypothesis if the significance value is> 0.05, then the data distribution is homogeneous. So it can be concluded that the distribution of the data for the two classes is homogeneous.

After fulfilling the requirements that the control and experimental class data were known to be normally distributed and homogeneous, the researcher entered the post-test data of the two classes into a statistical test, namely the t test. The calculation using the t test or t-test aims to determine the significant difference in the application of MMS (Metacognitive, Monitoring, Summarizing) in improving students' reading comprehension applied to the experimental class compared to those not applied in the control class.

The table below shows a summary of the independent t-test results of the pre-test and post-test scores.

Table 1. The Result of Pre-Test and Post-Test Score

t	df	Sig. (2-tailed)
.823	58	.414
-3.374	58	.001

Based on the study findings, there was no significant difference between the results of the CC and EC pre-tests. Based on the results of the t-test, it was confirmed that the significance value was 0.414 which was higher than α = 0.05. This means that CC and EC are not much different from the achievement of the initial reading test results. But afterwards, when the treatment has been given, the post-test results of the t-test results show that the significant value has a different level of achievement, namely 0.001 which is lower than α = 0.05. So that there are significant differences between before and after treatment and between CC and EC, especially in reading comprehension skills.

Discussion

The results of statistical analysis show that the implementation of MMS to improve reading comprehension is more effective than teaching reading using only one method. This can be said because MMS is a combined method of the three methods commonly used in teaching reading, which of these methods are very good in improving students' reading comprehension skills. Students as learners need to apply independent learning especially in online learning situations that are carried out at this time where metacognitive strategies are very suitable (Zhang and Sheepo, 2013).

After students are asked to do independent learning planning, especially in reading activities, students must always be monitored in the implementation of independent learning so that what is learned can be carried out and according to the objectives of learning as stated by Oakhill, Hartt, & Samols (2005). Finally, students must also be tested on what they have learned while they are doing independent learning, namely with a strategy of making a summary of what they have learned (Assaadi & Zoghi, 2013). Thus it can be said that the series of activities are mutually sustainable, so that the MMS (Metacognitive, Monitoring, and Summarizing) method is very appropriate and appropriate in improving reading comprehension skills in English.

Conclusion

Based on the results of students at EC who were taught reading comprehension via MMS outperformed students in CC who were taught using the lecture method or GTM. Thus MMS is effective for improving reading comprehension skills of students of the 2nd semester of English study program at UHAMKA. These conclusions take into account some of the previous research findings and theories about the nature of MMS and its effectiveness for use in the Teaching of English as a Foreign Language (TEFL) as outlined earlier in the above explanation.

Based on the conclusion, the results of this study indicate that EC students who were taught reading comprehension in English using TBL got better results than those who were taught using the lecture method. Thus, the researcher would like to suggest other lecturers or teachers who have similar problems as found by researchers in terms of teaching reading comprehension to change their reading class from traditional to more dynamic and communicative using MMS which can facilitate and improve their students' reading comprehension. Furthermore, the researcher also wants to suggest to other researchers to investigate other skills such as listening, pronunciation, and speaking to check the possible role of MMS in them.

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